



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/810,212

03/26/2004

Hiroyuki Hirota

81922.0008

8380

26021

7590

10/24/2007

HOGAN & HARTSON L.L.P.
1999 AVENUE OF THE STARS
SUITE 1400
LOS ANGELES, CA 90067

EXAMINER

DOVE, TRACY MAE

ART UNIT

PAPER NUMBER

1795

MAIL DATE

DELIVERY MODE

10/24/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/810,212	Applicant(s) HIROTA, HIROYUKI	
	Examiner Tracy Dove	Art Unit 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to the communication filed on 7/18/07. Applicant's arguments have been considered, but are not persuasive. Claims 1-5 are pending. This Action is FINAL, as necessitated by amendment.

Election/Restrictions

Applicant's election of Group I in the reply filed on 4/17/07 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2 and 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 2 recites improper Group language and the claim is confusing and unclear. Claim 1 does not require two pairs of terminals (2 positive and 2 negative) and it is unclear how a single terminal of the "pair of terminals" recited by claim 1 protrudes from both "a side provided with the circuit board and from a side not provided with the circuit board" as recited by claim 2.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

Art Unit: 1795

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over, Hirota, JP 2002-260615.

Hirota teaches a battery cell 4, a connector 6 and a circuit board 5. The circuit board 5 is electrically connected to respective terminals of the battery cell 4. The battery cell 4, the connector 6 and the circuit board 5 are integrally molded by a resin mold part 3 (abstract). As shown in at least Figure 3, the circuit board is on a first side of the battery cell, the positive electrode terminal is on a second side of the battery cell and the negative electrode terminal is on a third side of the battery cell. A negative electrode connection member 7 connects the negative electrode terminal to the circuit board and the positive electrode connection member 8 connects the positive electrode terminal to the circuit board. The connector 6 is provided on the circuit board 5. An insulator sheet 9 insulates the negative electrode connection member from the battery cell. The figures show a rectangular battery cell. The connector 6 has a housing arranged on the circuit board and external connecting terminals electrically connected to the circuit board for connecting the battery cell and portable telephone (0013). Hirota discloses the resin flowing in from a resin injection channel 14 spreads to both sides of the connector leaving the connector surface exposed. Thus the resin must flow, via a resin path, by the connector. See Figure 5. Note the top of the housing may also be considered a side of the housing.

Hirota does not explicitly state the resin path is provided between the connector and the circuit board. However, this limitation is considered obvious in view of the teachings of Hirota. Hirota teaches it is known in the art to integrally mold a connector and a circuit board via a resin

Art Unit: 1795

mold part to improve manufacturing efficiency (abstract). The limitation “a molded resin portion continuously formed via the resin path” is considered inherent in the teachings of Hirota.

Response to Arguments

Applicant's arguments filed 7/18/07 have been fully considered but they are not persuasive. Applicant argues, as seen in Figure 3, Hirota does not provide a resin path between connector 6 and circuit board 5. However, this limitation has been rejected as obvious because Hirota teaches it is known in the art to integrally mold a connector and a circuit board via a resin mold part to improve manufacturing efficiency (abstract). Applicant asserts connector 6 is an enclosed and solid structure such that resin cannot flow under connector 6 and between the connector and circuit board 5. Examiner disagrees and requests Applicant point out the section of Hirota that discloses the connection is an enclosed and solid structure. Applicant asserts resin can only flow along outside surface 6b of connector 6, since there is no space between connector 6 and circuit board 3 to form a resin path. Again, Examiner requests Applicant point out the section of Hirota that discloses this element. Furthermore, one of skill in the art would have been motivated to integrally mold a connector and circuit board of a battery cell in view of the teachings of Hirota.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

Art Unit: 1795

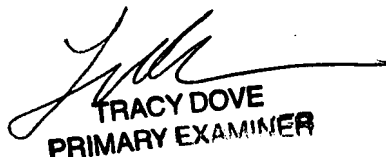
MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tracy Dove whose telephone number is 571-272-1285. The examiner can normally be reached on Monday-Thursday (9:00-7:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

October 22, 2007


TRACY DOVE
PRIMARY EXAMINER